

WHAT IS CLAIMED IS:

1. A bicycle front fork assembly, comprising:
a steer tube;
a pair of legs extending in a downward direction from said steer tube and spaced from one another in a lateral direction, each of said pair of legs having an upper portion, a lower portion and an intermediate portion and defining a substantially fixed length, said fork assembly being configured to support a wheel at said lower portions of said pair of legs, said pair of legs being interconnected at said upper portion, each of said intermediate portions having an internal wall defining an internal cavity;
a damping member positioned within said cavity and contacting said internal wall, said damping member comprising a vibration damping material.
2. The fork assembly of Claim 1, wherein an entire perimeter of said damping member contacts said internal wall.
3. The fork assembly of Claim 2, wherein said damping member is generally rectangular in horizontal cross-section.
4. The fork assembly of Claim 1, wherein said vibration damping material comprises an elastomeric material.
5. The fork assembly of Claim 1, wherein each of said pair of legs is curved forwardly in a longitudinal direction such that said lower portions of said pair of legs are spaced to a forward side of an axis defined by said steer tube, said internal cavity being located generally within said curve.
6. The fork assembly of Claim 1, wherein each of said intermediate portions of said pair of legs is curved inwardly in a lateral plane, said damping members being curved to conform with said curved intermediate portions.
7. The fork assembly of Claim 6, wherein an outer surface of said damping member is substantially linear.
8. The fork assembly of Claim 1, wherein said cavity extends completely through said leg.

9. The fork assembly of Claim 8, wherein said cavity extends through said leg in a lateral direction.

10. The fork assembly of Claim 9, wherein said internal wall comprises a first side and a second side facing said first side, an middle portion of said first side and second side being curved toward one another such that a width of said cavity is reduced in said middle portion, said damping member shaped to substantially conform to said reduced width of said cavity.

11. A bicycle front fork assembly, comprising:

a steer tube;

a pair of hollow, tubular legs extending in a downward direction from said steer tube and spaced from one another in a lateral direction, each of said pair of legs defining a substantially fixed length, said fork assembly being configured to support a wheel at a lower end of said pair of legs, each of said pair of legs having an outer wall portion and an internal wall portion, said internal wall portion extending from a first side of said outer wall portion to a second side of said outer wall portion opposite said first side and defining an internal cavity;

a damping member positioned within said cavity and contacting said internal wall, said damping member comprising a vibration damping material.

12. The fork assembly of Claim 11, wherein said fork assembly is configured to support a wheel for rotation about a hub axis, said internal wall portion being substantially parallel to said hub axis.

13. The fork assembly of Claim 11, wherein each of said pair of legs includes an upper portion, an intermediate portion and a lower portion, said internal cavity being located within said intermediate portion of said pair of legs.

14. The fork assembly of Claim 11, wherein an entire perimeter of said damping member contacts said internal wall.

15. The fork assembly of Claim 14, wherein said damping member is generally rectangular in horizontal cross-section.

16. The fork assembly of Claim 11, wherein said vibration damping material comprises an elastomeric material.

17. The fork assembly of Claim 11, wherein each of said pair of legs is curved forwardly in a longitudinal direction such that said lower ends of said pair of legs are spaced to a forward side of an axis defined by said steer tube, said internal cavity being located generally within said curve.

18. The fork assembly of Claim 11, wherein each of said intermediate portions of said pair of legs is curved inwardly in a lateral plane, said damping members being curved to conform with said curved intermediate portions.

19. The fork assembly of Claim 18, wherein an outer surface of said damping member is substantially linear.

20. The fork assembly of Claim 11, wherein said cavity extends completely through said leg.

21. The fork assembly of Claim 20, wherein said cavity extends through said leg in a lateral direction.

22. The fork assembly of Claim 11, wherein said internal wall comprises a first side and a second side facing said first side, an middle portion of said first side and second side being curved toward one another such that a width of said cavity is reduced in said middle portion, said damping member shaped to substantially conform to said reduced width of said cavity.

23. A bicycle, comprising:

- a frame, said frame supporting a pedal crank assembly and a rear wheel, said pedal crank assembly being configured to drive said rear wheel;

- a front fork assembly, said fork assembly being rotatably supported by said frame for pivotal movement about a steering axis, said fork assembly being configured to support a front wheel of said bicycle at a lower end of said fork, said fork assembly comprising;

- a steer tube;

- a pair of hollow, tubular legs extending in a downward direction from said steer tube and spaced from one another in a lateral direction, each of said pair of legs defining a substantially fixed length, said fork assembly being configured to support a wheel at a lower end of said pair of legs, each of said

pair of legs having an outer wall portion and an internal wall portion, said internal wall portion extending from a first side of said outer wall portion to a second side of said outer wall portion opposite said first side and defining an internal cavity;

a damping member positioned within said cavity and contacting said internal wall, said damping member comprising a vibration damping material.

24. The bicycle of Claim 23, wherein said fork assembly is configured to support a wheel for rotation about a hub axis, said internal wall portion being substantially parallel to said hub axis.

25. The bicycle of Claim 23, wherein each of said pair of legs includes an upper portion, a lower portion and an intermediate portion, said internal cavity being located within said intermediate portion of said pair of legs.

26. The bicycle of Claim 23, wherein an entire perimeter of said damping member contacts said internal wall.

27. The bicycle of Claim 26, wherein said damping member is generally rectangular in horizontal cross-section.

28. The bicycle of Claim 23, wherein said vibration damping material comprises an elastomeric material.

29. The bicycle of Claim 23, wherein each of said pair of legs is curved forwardly in a longitudinal direction such that said lower ends of said pair of legs are spaced to a forward side of an axis defined by said steer tube, said internal cavity being located generally within said curve.

30. The bicycle of Claim 23, wherein each of said intermediate portions of said pair of legs is curved inwardly in a lateral plane, said damping members being curved to conform with said curved intermediate portions.

31. The bicycle of Claim 30, wherein an outer surface of said damping member is substantially linear.

32. The bicycle of Claim 23, wherein said cavity extends completely through said leg.

33. The bicycle of Claim 32, wherein said cavity extends through said leg in a lateral direction.

34. The bicycle of Claim 23, wherein said internal wall comprises a first side and a second side facing said first side, an middle portion of said first side and second side being curved toward one another such that a width of said cavity is reduced in said middle portion, said damping member shaped to substantially conform to said reduced width of said cavity.

35. A bicycle, comprising:

- a main frame portion;

- a front wheel and a rear wheel connected to said main frame portion;

- a pedal crank assembly, said pedal crank assembly being supported by the main frame portion and configured to drive said rear wheel;

- a wheel support portion connected to said main frame at a first end and supporting one of said front wheel and said rear wheel at a second end, said wheel support portion comprising a pair of legs extending along opposing sides of said one of said front wheel and said rear wheel, each of said pair of legs defining a substantially fixed length, each of said pair of legs having an outer wall portion and an internal wall portion, said internal wall portion extending from a first side of said outer wall portion to a second side of said outer wall portion opposite said first side and defining an internal cavity;

- a damping member positioned within said cavity and contacting said internal wall, said damping member comprising a vibration damping material.

36. The bicycle of Claim 35, wherein said wheel support portion is configured to support a wheel for rotation about a hub axis, said internal wall portion being substantially parallel to said hub axis.

37. The bicycle of Claim 35, wherein each of said pair of legs includes a first end portion, a second end portion and an intermediate portion, said internal cavity being located within said intermediate portion.

38. The bicycle of Claim 35, wherein an entire perimeter of said damping member contacts said internal wall.

39. The bicycle of Claim 38, wherein said damping member is generally rectangular in horizontal cross-section.

40. The bicycle of Claim 35, wherein said vibration damping material comprises an elastomeric material.

41. The bicycle of Claim 35, wherein each of said pair of legs is curved forwardly in a longitudinal direction such that said lower ends of said pair of legs are spaced to a forward side of an axis defined by said steer tube, said internal cavity being located generally within said curve.

42. The bicycle of Claim 35, wherein each of said intermediate portions of said pair of legs is curved inwardly in a lateral plane, said damping members being curved to conform with said curved intermediate portions.

43. The bicycle of Claim 42, wherein an outer surface of said damping member is substantially linear.

44. The bicycle of Claim 35, wherein said cavity extends completely through said leg.

45. The bicycle of Claim 44, wherein said cavity extends through said leg in a lateral direction.

46. The bicycle of Claim 35, wherein said internal wall comprises a first side and a second side facing said first side, an middle portion of said first side and second side being curved toward one another such that a width of said cavity is reduced in said middle portion, said damping member shaped to substantially conform to said reduced width of said cavity.

47. A wheel support for a bicycle, comprising:

a body including a pair of legs each having a first end, a second end, and an intermediate portion extending between the first and second ends, said pair of legs interconnected at said first ends and configured to support a bicycle wheel at said second ends, each of said pair of legs defining a substantially fixed length between said first and second ends, each of said intermediate portions including an outer wall portion and an internal wall portion defining a cavity;

a damping member positioned within said cavity and contacting said internal wall, said damping member comprising a vibration damping material;

wherein said outer wall portion and said damping member each define a portion of an external surface of said wheel support.

48. The wheel support of Claim 47, wherein said pair of legs support said bicycle wheel at said second ends for rotation about an axis, said internal wall portion extending from said outer wall portion in a direction substantially parallel to said axis.

49. The wheel support of Claim 48, wherein said interior wall portion connects opposing sides of said outer wall portion such that said cavity extends completely through said leg.

50. The wheel support of Claim 47, additionally comprising a dropout supported by said second end of each of said pair of legs, said dropouts configured to receive said bicycle wheel.

51. A wheel support for a bicycle, comprising:

a body including a first leg and a second leg each having a first end, a second end, and an intermediate portion extending between said first and second ends, said first and second legs interconnected at said first ends and configured to support a bicycle wheel at said second ends, each of said first and second legs defining a substantially fixed length between said first and second ends, each of said intermediate portions including an outer wall portion and an internal wall portion defining a cavity;

a damping member positioned within said cavity and contacting said internal wall, said damping member comprising a vibration damping material;

wherein each of said cavities extends a distance along said fixed length of said first and second legs that is less than said fixed length.

52. The wheel support of Claim 51, wherein said first and second legs support said bicycle wheel at said second ends for rotation about an axis, said internal wall portion extending from said outer wall portion in a direction substantially parallel to said axis.

53. The wheel support of Claim 52, wherein said interior wall portion connects opposing sides of said outer wall portion such that said cavity extends completely through said leg.

54. The wheel support of Claim 51, additionally comprising a dropout supported by said second end of each of said first and second legs, said dropouts configured to receive said bicycle wheel.

55. A method of manufacturing a wheel support for a bicycle, comprising:

constructing a body including a pair of legs interconnected at a first end and configured to support a bicycle wheel at a second end, each of said pair of legs defining a substantially fixed length between said first end and said second end, an intermediate portion between said first and second end including an outer wall portion and an internal wall portion defining a cavity;

inserting a damping member into said cavity, said damping member comprising a vibration damping material.

56. The method of Claim 55, further comprising securing a dropout to said second end of each of said pair of legs.